



SEQUENCE LISTING

<110> Bunney Jr., William E.
Jones, Edward G.
Molnar, Margherita
The Board of Trustees of The Leland Stanford
Junior University

<120> Genes Involved in Neuropsychiatric Disorders

<130> 020885-000720US

<140> US 10/649,400

<141> 2003-08-26

<150> US 60/406,879

<151> 2002-08-28

<150> US 60/451,306

<151> 2003-02-27

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<170> PatentIn Ver. 2.1

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<212> DNA

<213> Homo sapiens

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alpha-B subunit (CAMKII-alpha) cDNA

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<222> (7)..(1476)

<223> CAMKII-alpha

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<221> misc_feature

<222> (874)..(1223)

<223> CAMKII-alpha riboprobe sequence

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<210> 2

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<212> PRT

<213> Homo sapiens

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<223> calcium/calmodulin dependent protein kinase II
alpha-B subunit (CAMKII-alpha)

<400> 2

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Glu Glu Leu Gly Lys Gly Ala Phe Ser Val Val Arg Arg Cys Val Lys
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Val Leu Ala Gly Gln Glu Tyr Ala Ala Lys Ile Ile Asn Thr Lys Lys
      35                      40                     45

Leu Ser Ala Arg Asp His Gln Lys Leu Glu Arg Glu Ala Arg Ile Cys
      50                      55                     60

Arg Leu Leu Lys His Pro Asn Ile Val Arg Leu His Asp Ser Ile Ser
      65                      70                     75                     80

Glu Glu Gly His His Tyr Leu Ile Phe Asp Leu Val Thr Gly Gly Glu
      85                      90                     95

Leu Phe Glu Asp Ile Val Ala Arg Glu Tyr Tyr Ser Glu Ala Asp Ala
      100                     105                     110

Ser His Cys Ile Gln Gln Ile Leu Glu Ala Val Leu His Cys His Gln
      115                     120                     125

Met Gly Val Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Leu Ala
      130                     135                     140

Ser Lys Leu Lys Gly Ala Ala Val Lys Leu Ala Asp Phe Gly Leu Ala
      145                     150                     155                     160

Ile Glu Val Glu Gly Glu Gln Gln Ala Trp Phe Gly Phe Ala Gly Thr
      165                     170                     175

Pro Gly Tyr Leu Ser Pro Glu Val Leu Arg Lys Asp Pro Tyr Gly Lys
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Pro Val Asp Leu Trp Ala Cys Gly Val Ile Leu Tyr Ile Leu Leu Val
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<212> PRT

<213> Homo sapiens

<220>

<223> T-brain-1 (TBR1)

<400> 4

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Val Leu His Asp His Pro Ile Ile Ser Thr Thr Asp Asn Leu Glu Arg
      35              40              45

Ser Ser Pro Leu Lys Lys Ile Thr Arg Gly Met Thr Asn Gln Ser Asp
      50              55              60

Thr Asp Asn Phe Pro Asp Ser Lys Asp Ser Pro Gly Asp Val Gln Arg
      65              70              75              80

Ser Lys Leu Ser Pro Val Leu Asp Gly Val Ser Glu Leu Arg His Ser
      85              90              95

Phe Asp Gly Ser Ala Ala Asp Arg Tyr Leu Leu Ser Gln Ser Ser Gln
      100              105              110

Pro Gln Ser Ala Ala Thr Ala Pro Ser Ala Met Phe Pro Tyr Pro Gly
      115              120              125

Gln His Gly Pro Ala His Pro Ala Phe Ser Ile Gly Ser Pro Ser Arg
      130              135              140

Tyr Met Ala His His Pro Val Ile Thr Asn Gly Ala Tyr Asn Ser Leu
      145              150              155              160

Leu Ser Asn Ser Ser Pro Gln Gly Tyr Pro Thr Ala Gly Tyr Pro Tyr
      165              170              175

Pro Gln Gln Tyr Gly His Ser Tyr Gln Gly Ala Pro Phe Tyr Gln Phe
      180              185              190

Ser Ser Thr Gln Pro Gly Leu Val Pro Gly Lys Ala Gln Val Tyr Leu
      195              200              205

Cys Asn Arg Pro Leu Trp Leu Lys Phe His Arg His Gln Thr Glu Met
      210              215              220

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Ile	Leu	Ala	Asp	Pro	Asn	His	Trp	Arg	Phe	Gln	Gly	Gly	Lys	Trp	Val	260	265		270
Pro	Cys	Gly	Lys	Ala	Asp	Thr	Asn	Val	Gln	Gly	Asn	Arg	Val	Tyr	Met	275	280		285
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Ser	Phe	Gly	Lys	Leu	Lys	Leu	Thr	Asn	Asn	Lys	Gly	Ala	Ser	Asn	Asn	305	310	315	320
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Val	Thr	Ala	Tyr	Gln	Asn	Thr	Asp	Ile	Thr	Gln	Leu	Lys	Ile	Asp	His	370	375		380
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Ser	Gln	Ile	Val	Pro	Gly	Ala	Arg	Tyr	Ala	Met	Ala	Gly	Ser	Phe	Leu	420	425		430
Gln	Asp	Gln	Phe	Val	Ser	Asn	Tyr	Ala	Lys	Ala	Arg	Phe	His	Pro	Gly	435	440		445
Ala	Gly	Ala	Gly	Pro	Gly	Pro	Gly	Thr	Asp	Arg	Ser	Val	Pro	His	Thr	450	455		460
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Pro	Gln	Arg	Trp	Phe	Val	Thr	Pro	Ala	Asn	Asn	Arg	Leu	Asp	Phe	Ala	485	490		495
Ala	Ser	Ala	Tyr	Asp	Thr	Ala	Thr	Asp	Phe	Ala	Gly	Asn	Ala	Ala	Thr	500	505		510
Leu	Leu	Ser	Tyr	Ala	Ala	Ala	Gly	Val	Lys	Ala	Leu	Pro	Leu	Gln	Ala	515	520		525
Ala	Gly	Cys	Thr	Gly	Arg	Pro	Leu	Gly	Tyr	Tyr	Ala	Asp	Pro	Ser	Gly	530	535		540

Trp Gly Ala Arg Ser Pro Pro Gln Tyr Cys Gly Thr Lys Ser Gly Ser
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 Gly Ala Asn Pro Tyr Leu Gly Glu Glu Ala Glu Gly Leu Ala Ala Glu
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 Arg Ser Pro Leu Pro Pro Gly Ala Ala Glu Asp Ala Lys Pro Lys Asp
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 610 615 620
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 Ser Pro Ala Asp Thr Pro Val Ser Glu Ser Ser Ser Pro Leu Lys Ser
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(CAMKI) cDNA

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<212> PRT

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Glu Val Ile Leu Ala Glu Asp Lys Arg Thr Gln Lys Leu Val Ala Ile
      35              40              45

Lys Cys Ile Ala Lys Glu Ala Leu Glu Gly Lys Glu Gly Ser Met Glu
      50              55              60

Asn Glu Ile Ala Val Leu His Lys Ile Lys His Pro Asn Ile Val Ala
      65              70              75              80

Leu Asp Asp Ile Tyr Glu Ser Gly Gly His Leu Tyr Leu Ile Met Gln
      85              90              95

Leu Val Ser Gly Gly Glu Leu Phe Asp Arg Ile Val Glu Lys Gly Phe
      100             105             110

Tyr Thr Glu Arg Asp Ala Ser Arg Leu Ile Phe Gln Val Leu Asp Ala
      115             120             125

Val Lys Tyr Leu His Asp Leu Gly Ile Val His Arg Asp Leu Lys Pro
      130             135             140

Glu Asn Leu Leu Tyr Tyr Ser Leu Asp Glu Asp Ser Lys Ile Met Ile
      145             150             155             160

Ser Asp Phe Gly Leu Ser Lys Met Glu Asp Pro Gly Ser Val Leu Ser
      165             170             175

Thr Ala Cys Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu Ala Gln
      180             185             190

Lys Pro Tyr Ser Lys Ala Val Asp Cys Trp Ser Ile Gly Val Ile Ala
      195             200             205

Tyr Ile Leu Leu Cys Gly Tyr Pro Pro Phe Tyr Asp Glu Asn Asp Ala
      210             215             220

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Lys Leu Phe Glu Gln Ile Leu Lys Ala Glu Tyr Glu Phe Asp Ser Pro
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 Met Glu Lys Asp Pro Glu Lys Arg Phe Thr Cys Glu Gln Ala Leu Gln
 260 265 270
 His Pro Trp Ile Ala Gly Asp Thr Ala Leu Asp Lys Asn Ile His Gln
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 Ser Val Ser Glu Gln Ile Lys Lys Asn Phe Ala Lys Ser Lys Trp Lys
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 Gln Ala Phe Asn Ala Thr Ala Val Val Arg His Met Arg Lys Leu Gln
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 Leu Gly Thr Ser Gln Glu Gly Gln Gly Gln Thr Ala Ser His Gly Glu
 325 330 335
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 Gln Leu
 370

<210> 7
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:poly-Gly
 flexible linker

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 <222> (6)..(200)
 <223> Gly residues from position 6 to 200 may be present
 or absent

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 20 25 30
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 35 40 45
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 50 55 60
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 65 70 75 80

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